<u>In the Claims:</u>

1-140 (cancelled)

141.   (new) A wired Ethernet communication device operable to communicate via a wired Ethernet link with an Ethernet link partner, the wired Ethernet communication device comprising:

Ethernet transceiver circuitry operable to support communications with the Ethernet link partner at a plurality of rates including a lowest rate and a plurality of higher rates;

an abilities register operable to store information regarding the plurality of higher rates; and

auto negotiation circuitry communicatively coupled to the Ethernet transceiver circuitry and to the abilities register, the auto negotiation circuitry operable to:

access the abilities register to read the information regarding the plurality of higher rates;

write a supported rates variable with the information regarding the plurality of higher rates read from the abilities register;

write a qualified supported rates variable with the contents of the supported rates variable;

access at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, alter the qualified supported rates variable based upon the downgrade indication variable; and

perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable.

142. (new) The wired Ethernet communication device of claim 141, further comprising a host interface communicatively coupled to receive the at least one downgrade indication variable from a coupled host.

143. (new) The wired Ethernet communication device of claim 141, wherein the auto negotiation circuitry is further operable to:

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

fail to establish a link with the Ethernet link partner at the first link rate according to predefined conditions;

alter the qualified supported rates variable to exclude the first link rate;

negotiate a second link rate with the Ethernet link partner based upon the qualified supported rates variable, wherein the second link rate is less than the first link rate; and

attempt to establish a link with the Ethernet link partner at the second link rate.

144.   (new) The wired Ethernet communication device of claim 141, wherein the auto negotiation circuitry is further operable to:

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

establish a link with the Ethernet link partner at the first link rate;

determine that the link at the first link rate has failed;

again write the qualified supported rates variable with the contents of the supported rates variable;

again access the at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, again alter the qualified supported rates variable based upon the downgrade indication variable; and

again perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable.

145.   (new) The wired Ethernet communication device of claim 141, wherein the at least one downgrade information variable comprises:

a gigabit mask variable indicating the availability of 1000 BASE-T operations; and

a one hundred megabit mask variable indicating the availability of 100 BASE-T operations.

146.   (new) The wired Ethernet communication device of claim 141, further comprising a host interface communicatively coupled to the auto negotiation circuitry, wherein:

the host interface is operable to receive information from a coupled host; and

the auto negotiation circuitry is operable to set the at least one downgrade indication variable based upon the information received via the host interface.

147.   (new) The wired Ethernet communication device of claim 141, wherein the abilities register comprises Register 9 as defined in at least the IEEE Std. 802.3, 2000 Edition.

148.   (new) The wired Ethernet communication device of claim 147, wherein the abilities register statically stores the information regarding the plurality of higher rates.

149.   (new) The wired Ethernet communication device of claim 141, wherein the auto negotiation circuitry is further operable to:

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

fail to establish a link with the Ethernet link partner at the first link rate according to predefined conditions;

alter the qualified supported rates variable to exclude the first link rate;

negotiate a second link rate with the Ethernet link partner based upon the qualified supported rates variable, wherein the second link rate is less than the first link rate;

establish a link with the Ethernet link partner at the second link rate;

determine that the link at the second link rate has failed;

again write the qualified supported rates variable with the contents of the supported rates variable;

again access the at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, again alter the qualified supported rates variable based upon the downgrade indication variable; and

again perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable.

150. (new) A wired Ethernet communication device operable to communicate via a wired Ethernet link with an Ethernet link partner, the wired Ethernet communication device comprising:

Ethernet transceiver circuitry operable to support communications with the Ethernet link partner at a plurality of rates including a lowest rate and a plurality of higher rates;

an abilities register operable to store information regarding the plurality of higher rates; and

auto negotiation circuitry communicatively coupled to the Ethernet transceiver circuitry and to the abilities register, the auto negotiation circuitry operable to:

access the abilities register to read the information regarding the plurality of higher rates;

write a supported rates variable with the information regarding the plurality of higher rates read from the abilities register;

write a qualified supported rates variable with the contents of the supported rates variable;

access at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, alter the qualified supported rates variable based upon the downgrade indication variable;

perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable;

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

fail to establish a link with the Ethernet link partner at the first link rate after a predetermined number of attempts to establish the link at the first link rate;

alter the qualified supported rates variable to exclude the first link rate;

negotiate a second link rate with the Ethernet link partner based upon the qualified supported rates variable, wherein the second link rate is less than the first link rate; and

attempt to establish a link with the Ethernet link partner at the second link rate.

151. (new) The wired Ethernet communication device of claim 150, further comprising a host interface communicatively coupled to receive the at least one downgrade indication variable from a coupled host.

152.   (new) The wired Ethernet communication device of claim 150, wherein the auto negotiation circuitry is further operable to:

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

establish a link with the Ethernet link partner at the first link rate;

determine that the link at the first link rate has failed;

again write the qualified supported rates variable with the contents of the supported rates variable;

again access the at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, again alter the qualified supported rates variable based upon the downgrade indication variable; and

again perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable.

153.   (new) The wired Ethernet communication device of claim 150, wherein the at least one downgrade information variable comprises:

a gigabit mask variable indicating the availability of 1000 BASE-T operations; and

a one hundred megabit mask variable indicating the availability of 100 BASE-T operations.

154.   (new) The wired Ethernet communication device of claim 150, further comprising a host interface communicatively coupled to the auto negotiation circuitry, wherein:

the host interface is operable to receive information from a coupled host; and

the auto negotiation circuitry is operable to set the at least one downgrade indication variable based upon the information received via the host interface.

155.   (new) The wired Ethernet communication device of claim 150, wherein the abilities register comprises Register 9 as defined in at least the IEEE Std. 802.3, 2000 Edition.

156. (new) A wired Ethernet communication device operable to communicate via a wired Ethernet link with an Ethernet link partner, the wired Ethernet communication device comprising:

Ethernet transceiver circuitry operable to support communications with the Ethernet link partner at a plurality of rates including a lowest rate and a plurality of higher rates;

an abilities register operable to store information regarding the plurality of higher rates; and

auto negotiation circuitry communicatively coupled to the Ethernet transceiver circuitry and to the abilities register, the auto negotiation circuitry operable to:

access the abilities register to read the information regarding the plurality of higher rates;

write a supported rates variable with the information regarding the plurality of higher rates read from the abilities register;

write a qualified supported rates variable with the contents of the supported rates variable;

access at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, alter the qualified supported rates variable based upon the downgrade indication variable;

perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable;

negotiate a first link rate with the Ethernet link partner, the first link rate being one of the plurality of higher rates;

fail to establish a link with the Ethernet link partner at the first link rate according to predefined conditions;

alter the qualified supported rates variable to exclude the first link rate;

negotiate a second link rate with the Ethernet link partner based upon the qualified supported rates variable, wherein the second link rate is less than the first link rate;

establish a link with the Ethernet link partner at the second link rate;

determine that the link at the second link rate has failed;

again write the qualified supported rates variable with the contents of the supported rates variable;

again access the at least one downgrade indication variable;

when the at least one downgrade indication variable indicates a higher rates downgrade, again alter the qualified supported rates variable based upon the downgrade indication variable; and

again perform auto negotiation with the Ethernet link partner based upon the qualified supported rates variable.

157. (new) The wired Ethernet communication device of claim 156, further comprising a host interface communicatively coupled to receive the at least one downgrade indication variable from a coupled host.

158. (new) The wired Ethernet communication device of claim 156, wherein the at least one downgrade information variable comprises:

a gigabit mask variable indicating the availability of 1000 BASE-T operations; and

a one hundred megabit mask variable indicating the availability of 100 BASE-T operations.

159. (new) The wired Ethernet communication device of claim 156, further comprising a host interface communicatively coupled to the auto negotiation circuitry, wherein:

the host interface is operable to receive information from a coupled host; and

the auto negotiation circuitry is operable to set the at least one downgrade indication variable based upon the information received via the host interface.

160. (new) The wired Ethernet communication device of claim 141, wherein:

the abilities register comprises Register 9 as defined in at least the IEEE Std. 802.3, 2000 Edition; and

the abilities register statically stores the information regarding the plurality of higher rates.